

A SELECTED BIBLIOGRAPHY ON THE MASS PROPAGATION
OF ROTIFERS WITH EMPHASIS ON THE BIOLOGY
AND CULTURE OF *BRACHIONUS PLICATILIS*

MOBASHIR A. SOLANGI AND JOHN T. OGLE

Parasitology and Oyster Biology Sections, Gulf Coast Research
Laboratory, Ocean Springs, Mississippi 39564

ABSTRACT The rotifer *Brachionus plicatilis* has shown great promise as food for artificially reared fish and crustacean larvae. A list of references on mass propagation of rotifers is presented alphabetically by author. Citations cover and are indexed as culture, diet, ecology, physiology, population dynamics, reproduction, systematics, geographical distribution, food, and biology of rotifers with emphasis on *Brachionus plicatilis*.

INTRODUCTION

There has been a growing demand in recent years for food-organisms for artificially propagated fish and crustacean larvae. The brine shrimp, *Artemia salina*, is a widely used organism to feed larval forms. However, increasing costs of brine shrimp cysts have forced the aquaculturist to seek alternate sources of living food-organisms.

Some rotifers appear to fill this need in addition to providing other benefits. The rotifer *Brachionus plicatilis* is especially notable because of its short life cycle, simple dietary requirements, capability of high density cultiva-

tion, and nutrient value, and it has shown great promise as initial and supplementary food for larval fishes and crustaceans.

The following list of references, arranged in alphabetical order by author, is incomplete, but provides an easy reference to the pertinent literature. Citations cover and are indexed as culture, diet, ecology, physiology, population dynamics, reproduction, systematics, geographical distribution, food, and biology of rotifers with emphasis on the genus *Brachionus*. The term "diet" refers to food utilized by rotifers, whereas "food" denotes usage of rotifers by other organisms for food.

BIBLIOGRAPHY

1. Adachi, R. 1963. Studies on the culture of rotifer *Lecane tenuiseta* Harring. I. Culture method and food. *J. Fac. Fish. Prefect. Univ. Mie.* 6(1): 48-56. In Japanese. CULTURE, DIET.
2. ———. 1964. Studies on the culture of rotifer *Lecane tenuiseta* Harring. II. Organic nutrition. *J. Fac. Fish. Prefect. Univ. Mie.* 6(2):193-202. In Japanese. CULTURE, DIET.
3. ———. 1964. Studies on the culture of rotifer *Lecane tenuiseta* Harring. III. Environmental factors upon the growth of *Lecane*. *J. Fac. Fish. Prefect. Univ. Mie.* 6(2):203-210. In Japanese. CULTURE, ECOLOGY, PHYSIOLOGY.
4. Adzhimuradov, K. A. 1972. Pitanie moldi sazana *Cyprinus L.* v. Arakumskikh vodoemakh (del'ta r. terek) na ranaikh etapakh razvitiya. *Vopr. Ikhtiol.* 12(6):1079-1085. FOOD.
5. Aoki, K. & H. Konno. 1961. Frost-resistance of the rotifer in antarctic region. *Bull. Mar. Biol. Stn. Asamuchi* 10:247-250. PHYSIOLOGY.
6. Aronovich, T. M. & L. V. Spektrova. 1974. Vyzhivanie i plodovitost' *Brachionus calyciflorus* v vode raznoi solenosti. *Gidrobiol. Zh.* 10(5):90-95. FOOD, PHYSIOLOGY, REPRODUCTION.
7. Arora, H. C. 1966. Studies on Indian Rotifera. III. On *Brachionus calyciflorus* and some varieties of the species. *J. Zool. Soc. India* 16(1/2):1-6. SYSTEMATICS.
8. ———. 1966. Responses of rotifera to variations in some ecological factors. *Proc. Indian Acad. Sci.* 63B:57-66. ECOLOGY.
9. ———. 1966. Rotifera as indicators of trophic nature of environments. *Hydrobiologia* 27:146-159. ECOLOGY.
10. Avila-Parga, G. 1973. Variacion y frecuencia de algunas especies de Rotiferos provenientes de la Cienaga Grande de Santa Marta (Columbia). *Mitt Inst Colombo-Aleman Invest Cient Punta de Betin* 7:15-30. POPULATION DYNAMICS.
11. Badalamente, M. & S. H. Vernick. 1973. The ultrastructure of *Bertramia asperospora* Fritsch, a microsporidan parasite of the rotifer *Branchionus plicatilis* Mueller. *Arch. Protistenkd.* 115(1):1-9. ECOLOGY.
12. Baker, A. 1951. Rotifera of Lahore. *Proc. 3rd Pakistan Sci. Conf.* pt. 3. 1951:28 [Abstract]. DISTRIBUTION, ECOLOGY.
13. Bardach, J. E., J. H. Ryther & W. O. McLarney.

1972. *Aquaculture: The farming and husbandry of fresh water and marine organism*. Wiley-Interscience. N.Y. pp. 294–295. FOOD.
14. Bartos, B. 1951. The Czechoslovak rotatoria of the order Bdelloidea. *Mems. Soc. Zool. tcheorl.* 15 1951:241–500. DISTRIBUTION, SYSTEMATICS, ECOLOGY.
 15. Berzins, B. 1957. Beitrag zur rotatorienfauna Gambieus. *Acta. Trop.* 14:230–235. DISTRIBUTION.
 16. ———. 1956. Liste de rotiferes provenant du lac de kourna, ile de crete (Greece). *Fragm. balc. Mus. Macedonici Sci. Nat.* 1. 1956:207–208. SYSTEMATICS, DISTRIBUTION.
 17. ———. 1973. Some rotifers from Cambodia. *Hydrobiologica* 41(4):453–459. SYSTEMATICS.
 18. ———. 1973. Rotatorien aus den Azoren. *Bol. Mus. Munic. Funchal* 27:84–89. DISTRIBUTION.
 19. Birky, C. W. & J. J. Gilbert. 1971. Parthenogenesis in rotifers: the control of sexual and asexual reproduction. *Am. Zool.* 11:245–266. REPRODUCTION.
 20. Bogoslovskii, A. S. 1958. Novye dannye po raznozheinyu kolovratok (Avtoref. Dokl. procht.) *Byul. Mosk. Obshch. Ispyt. Prir. Otd. Biol.* 64(1): 155. REPRODUCTION.
 21. ———. 1961. Systematics, geographical distribution and habitats of the rotifers *Brachionus nilsoni* Ahlstrom and *B. bennini* (Leissling). *Zool. Zh.* 40:602–604. In Russian. SYSTEMATICS, DISTRIBUTION, ECOLOGY.
 22. ———. 1962. Material to the study of the rotifer fauna of China. *Zool. Zh.* 41:1327–1333. In Russian. DISTRIBUTION, SYSTEMATICS, ECOLOGY.
 23. ———. 1963. Materials to the study of the resting eggs of rotifers (Communication), *Byul. Mosk. Obshch. Ispyt. Prir. Otd. Biol.* 68(6):56–67. In Russian. REPRODUCTION, BIOLOGY.
 24. ———. 1963. Materialy k izucheniyu pokoyashchikhsya yaits kolovratok. *Byul. Mosk. Obshch. Ispyt. Prir. Otd. Biol.* 68(6):50–67. REPRODUCTION.
 25. ———. 1967. Materialy k izucheniyu pokoyashchikhsya yaits kolovratok. II. *Byul. Mosk. Obshch. Ispyt. Prir. Otd. Biol.* 72(6):46–67. In Russian. REPRODUCTION.
 26. ———. 1967. Materialy k izucheniyu pokoyashchikhsya yaits kolovratok. Soobshchenie 3. *Byul. Mosk. Obshch. Ispyt. Prir. Otd. Biol.* 73(3): 60–79. In Russian. REPRODUCTION.
 27. Bryce, D. 1956. The nomenclature of Rotatoria. *Microscope* 11:60–66. SYSTEMATICS.
 28. Christiansen, M. E. & W. T. Yang. 1976. Feeding experiments on the larvae of the fiddler crab *Uca pugilator* (Brachyura, Ocypodidae), reared in the laboratory. *Aquaculture* 8(1):91–98. FOOD.
 29. Clement, P. 1969. Premieres observations sur l'ultrastructure comparee des teguments de Rotiferes. *Vie. Milieu. Ser. A Biol. Mar.* 20(3A):461–480. In French. BIOLOGY.
 30. De Beauchamp, P. 1938. Les cultures de Rotiferes sur Chlorelles: Premiers resultes en milieu septique. *Trav. Stn. Zool. de Wimereux* Vol. jubilaire Maurice Caullery, pp. 27–38. CULTURE, DIET.
 31. ———. 1965. Classe des Rotiferes. In: Grasse P.-P. *Traite de Zoologie Anatomie. Systematique, Rotifers, Gastrotriches, Kinorhynques* 4:1225–1379. SYSTEMATICS, BIOLOGY.
 32. ———. 1966. Observations a propos de Rotiferes. *Bull. Soc. Zool. Fr.* 91:55–58. SYSTEMATICS.
 33. De Maeseneer, J. 1971. Korte bijdrage tot de studie van de verspreiding van raderdieretjes in Belgie. *Meded. Rijksfac. Landbouwwetensch Gent.* 36(2): 717–723. DISTRIBUTION.
 34. De Oliveira, L., R. Donascimento, L. Krau, & A. Miranda. 1962. Observacoes ecologicas sobre *Brachionus plicatilis* Mueller em aguas tropicais, salobras e mesosaprobicas (Rotatoria). *Mem. Inst. Oswaldo Cruz* 60(2):155–163. ECOLOGY, PHYSIOLOGY.
 35. De Poortere, H. & N. Magis. 1967. Mise en evidence, localisation et dosage de la chitine dans la coque des oeufs de *Brachionus leydigii* Cohn et d'autres rotiferes. *Ann. Soc. Roy. Zool. Belg.* 97(3):187–195. BIOLOGY.
 36. Deschiens, R. 1968. Le controle de l'action des molluscicides chimiques sur les associations zoophyiques des eaux douces. *C. R. Hebd. Seances Acad. Sci. Ser. D. Sci. Natur.* (Paris) 266(18): 1860–1861. BIOLOGY.
 37. Donner, J. 1966. *Rotifers* [Translated and adapted by H. G. S. Wright] Fredrick Wayne & Co. Ltd. Lond., N. Y. 1966 [1st published in Germany 1956] pp. xii, 80. SYSTEMATICS, BIOLOGY.
 38. Doohan, M. 1973. An energy budget for adult *Brachionusplicatilis* Muller (Rotatoria). *Oecologia* (Berl) 13(4):351–362. CULTURE, DIET, ECOLOGY, REPRODUCTION.
 39. Dougherty, E. C. & B. Solberg. 1959. Laboratory culture of rotifers and gastrotrichs. I. Xenic cultures. II Axenic, monoxenic, and attempted axenic cultures. *Anat. Rec.* 134:555–556 (Abstract). CULTURE.
 40. ———, B. Solberg & C. G. Harris. 1960. Synxenic and attempted axenic cultivation of rotifers. *Science* 132:416–417. CULTURE.
 41. ———, ——— & ———. 1961. Synxenic and attempted axenic cultivation of rotifers. *Anat. Rec.* 137:350–351 (Abstract).

42. Dougherty, E. C., B. A. Solberg & D. J. Ferral. 1961. The first axenic cultivation of a rotifer species. *Experientia* (17):131-132. CULTURE.
43. ———. 1963. Cultivation and nutrition of micro-metazoa. III. The minute rotifer *Lecane inermis* (Bryce, 1892) Harring, '13. *J. Exp. Zool.* 153(2): 183-186. CULTURE, DIET.
44. ———. 1964. Cultivation and nutrition of micro-metazoa. I. The antarctic rotifer *Philodina gregaria* Murray, 1910. *Trans. Amer. Microscop. Soc.* 83(1):1-6. CULTURE, DIET, REPRODUCTION.
45. Drechsler, C. 1965. A Harposporium parasitic on rotifers. *Mycopathol. Mycol. Appl.* 27(3/4):285-288. ECOLOGY.
46. Droop, M. R. 1975. The chemostat in mariculture. *Proc. 10th European Symposium on Marine Biology* (Persoone and Jasper, eds.) Ostend, Belgium. Sept. 17-23, 1975. CULTURE, DIET.
47. Dumont, H. J., I. Van De Velde & S. Dumont. 1975. The dry weight estimate of biomass in a selection of Cladocera, Copepoda and Rotifera from the plankton periphyton and benthos of continental waters. *Oecologia* (Beryl) 19(1):75-97. BIOLOGY.
48. Ebert, E. E. 1975. Completion Report Commercial Fisheries Research & Development Project. *Mariculture Research and Development*. 4-20-P. July 1, 1972 to June 30, 1975. FOOD.
49. Edmondson, W. T. 1946. Factors in the dynamics of rotifer populations. *Ecol. Monog.* 16:357-372. POPULATION DYNAMICS.
50. ———. 1960. Reproductive rates of rotifers in natural populations. *Mem. Ist. ital. Idrobiol. de Marchi* 12:21-77. REPRODUCTION, POPULATION DYNAMICS.
51. ———. 1964. The rate of egg production by rotifers and copepods in natural populations as controlled by food and temperature. *Verh. Inst. ver. limnol.* 15:673-675. DIET, REPRODUCTION, PHYSIOLOGY.
52. ———. 1965. Reproductive rate of planktonic rotifers as related to food and temperature in ration. *Ecol. Mongr.* 35(1):61-111. REPRODUCTION, DIET, PHYSIOLOGY.
53. Eriksen, B. G. 1968. Marine rotifers found in Norway, with descriptions of two new and one little known species. *Sarsia* 33:23-34. ECOLOGY, SYSTEMATICS.
54. ———. 1969. Rotifers from two tarns in southern Finland, with a description of a new species, and a list of rotifers previously found in Finland. *Acta Zool. Fenn.* 125:3-36. DISTRIBUTION, SYSTEMATICS.
55. Erman, L. A. 1956. On the qualitative food of Rotatoria. *Zool. Zh.* 35:965-971. In Russian. DIET, BIOLOGY.
56. ———. 1962. On the quantitative aspects of feeding and selectivity of food in the planktonic rotifer *Brachionus calyciflorus*. *Zool. Zh.* (Acad. Nauk USSR) 41:34-47. In Russian. DIET, BIOLOGY.
57. ———. 1962. Cyclomorphosis and feeding of plankton rotifera. *Zool. Zh.* 41:998-1003. In Russian. DIET, BIOLOGY.
58. Evans, J. 1954. An introduction to the rotifera. *Victorian Nat.* 71(6):91-94. BIOLOGY.
59. Fanestil, D. D. & C. H. Barrows. 1965. Aging in the rotifer. *J. Gerontol.* 20(4):462-469. CULTURE, DIET, PHYSIOLOGY, REPRODUCTION.
60. Filatov, V. I. 1972. Effektivnost' ispol' zovaniya estestvennykh kormov lichinkami karpa *Cyprinus carpio* L. *Vopr. Ikhtiol.* 12(5):886-892. FOOD.
61. Furukawa, I. & T. Hidaka. 1972. Mass culture of marine rotifer *Brachionus plicatilis* fed the marine yeast. Oral Presentation. Spring Meeting of Japan. *Soci. Sci. Fish.* CULTURE, DIET.
62. ——— & K. Hidaka. 1973. Technical problems encountered in the mass culture of the rotifer using marine yeast as food organism. *Bull. Plankton Soc. Jpn.* 20:61-71. CULTURE, DIET.
63. Gallagher, J. J. 1957. Generic classification of the Rotifera. *Proc. Pa. Acad. Sci.* 31:183-187. SYSTEMATICS.
64. ———. 1960. A note to rotifer investigators. *Am. Midl. Nat.* 63:247. BIOLOGY.
65. ———. 1962. World list of rotifer workers. *Trans. Amer. Micr. Soc.* 81:282-289. BIOLOGY.
66. ———. 1966. Rotifers new to Louisiana. *Proc. Louisiana Acad. Sci.* 29(1):59-63. DISTRIBUTION, SYSTEMATICS.
67. Galliford, A. L. 1961. How to begin the study of rotifers. Part 1-2. *Country-side N.S.* 19:150-156; 188-196. BIOLOGY.
68. ———. 1962. How to begin the study of rotifers. Part 3-5. *Country-side N.S.* 19:246-250, 291-296, 336-339. BIOLOGY.
69. ———. 1963. How to begin the study of rotifers. (6) Brief descriptions and diagrams of some typical rotifers (Contd.). *Country-side N.S.* 19:382-388. BIOLOGY.
70. ———. 1963. How to begin the study of rotifers. Part 7. Brief review of the literature relating to rotifers. *Country-side N.S.* 19:624-630. BIOLOGY.
71. Gilbert, J. J. 1966. Rotifer ecology and embryological induction. *Science* 151(3715):1234-1237. ECOLOGY, BIOLOGY, REPRODUCTION.

72. ———. 1963. Contact chemoreception, mating behavior, and sexual isolation in the rotifer genus *Brachionus*. *J. Exp. Biol.* 40(4):625–641. REPRODUCTION, BIOLOGY.
73. ———. 1963. Mictic female production in the rotifer *Brachionus calyciflorus*. *J. Exp. Zool.* 153(2):113–123. REPRODUCTION, CULTURE.
74. ———. 1967. Asplanchna, Asplanchna-substance, and posterolateral spine length variation of the rotifer *Brachionus calyciflorus* in a natural environment. *Ecology* 48(6):1027–1031. BIOLOGY, POPULATION DYNAMICS.
75. ———. 1970. Monoxenic cultivation of the rotifer *Brachionus calyciflorus* in a defined medium. *Oecologia* (Berlin) 4(1):89–101. CULTURE, POPULATION DYNAMICS.
76. ———. 1975. Dietary tocopherol and sexual reproduction in the rotifers *Brachionus calyciflorus* and *Asplanchna sieboldi*. *J. Exp. Zool.* 194(3):485–493. DIET, REPRODUCTION, BIOLOGY.
77. Godeanu, S. 1966. Contributii la cunoasterea rotiferilor in instalatiile de epurare biologica a apelor reziduale. *Stud. Protect. Epurarea. Apelor. Inst. Stud. Cercet. Hidrotehnice* 7(2):569–599. BIOLOGY.
78. Green, J. 1967. Associations of Rotifera in the zooplankton of the lake sources of the White Nile. *J. Zool. Proc. Zool. Soc. London* 151(3):343–378. POPULATION DYNAMICS.
79. ———. 1972. Latitudinal variation in associations of planktonic Rotifera. *J. Zool. Proc. Zool. Soc. Lond.* 167(1):31–38. DISTRIBUTION.
80. ———. 1972. Freshwater ecology in the Mato Grosso, Central Brazil: III. Associations of Rotifera in meander lakes of the Rio Suia Missu. *J. Nat. Hist.* 6(2):229–241. DISTRIBUTION, ECOLOGY, POPULATION DYNAMICS.
81. Grygierek, E. 1966. Produkcja planktonu w stawach. *Zesz. Probl. Kosmosu.* 13:47–56. ECOLOGY, FOOD.
82. ———. 1971. Some data on the role of food in the biology of *Eudiaptomus zachariasii* Poppe. *Ekol. Pol.* 19(21):277–292. FOOD.
83. Guttman, H. N. & A. D. Laderman. 1963. Induction of males in a usually parthenogenetic rotifer [*Brachionus rubens*]. In 16th International Congress of Zoology, 1963. *Proc. Internatl. Congress Zool.* 16(1):32. REPRODUCTION.
84. Halbach, U. 1970. Einfluss der temperatur auf die populationsdynamik des planktischen Raedertieres *Brachionus calyciflorus* Pallas. *Oecologia* 4(2):176–207. PHYSIOLOGY, POPULATION DYNAMICS.
85. ———. 1971. Einfluss der Nahrungsqualitaet und-qualitaet auf die populations-dynamik des planktischen Raedertieres *Brachionus calyciflorus* in Labor und in Freiland. *Verh. Dtsch. Zool. Ges.* 65:83–88. DIET, ECOLOGY, POPULATION DYNAMICS.
86. ———. 1972. Assoziation skoeffizienten dreien planktischer Rotatorienarten im Freiland und ihre Deutung aufgrund interspezifischer Beziehungen: (Konkurrenz, Raueber-Beute-Beziehung). *Oecologia* (Berl) 9(4):311–316. POPULATION DYNAMICS.
87. ——— & G. Halbach-Keup. 1972. Einfluss von Aussen Faktoren auf den Fortplanzungsmodus heteroyoner Rotatorien. *Oecologia* (Berl) 9(3):203–214. ECOLOGY, REPRODUCTION.
88. Hanley, J. 1954. Permanent preparations of Rotifera. *J. Quekett. Micr.* 1(4):41:18–25. BIOLOGY.
89. Harada, T. 1970. The present status of marine fish cultivation research in Japan. *Helgolander wiss. Meeresunters* 20:594–601. FOOD.
90. Haver, J. 1956. Ein neuer *Brachionus* (Rotatoria) aus Venezuela. *Beitr. Naturk. Forsch. Südwest. Dte.* 15:63–64. SYSTEMATICS, DISTRIBUTION.
91. Haydock, I. 1971. Gonad maturation and hormone-induced spawning of the gulf croaker, *Bairdiella icistia*. *U.S. Fish. Wildl. Serv. Fish. Bull.* 69(1):157–180. REPRODUCTION, PHYSIOLOGY.
92. Hillbricht-Ilkowska, A. 1963. Effect of carp fry as predators on some rotifer (Rotatoria) Spp. *Bull. Acad. Polon. Sci. Ser. Biol.* 11:87–89. FOOD.
93. Hirano, R. 1969. Rearing of Black Sea Bream larva. *Bull. Jap. Soc. Sci. Fish.* 35:567–569, 603–604. FOOD.
94. Hirata, H. 1974. An attempt to apply an experimental microcosm for the mass culture of marine rotifer, *Brachionus plicatilis* Muller. *Mem. Fac. Fish. Kagoshima Univ.* 23:163–172. CULTURE, DIET.
95. ——— & Y. Mori. 1967. Mass culture of marine rotifer *Brachionus plicatilis* fed the bread yeast. *Saibai-Gyogyo* 5(1):36–40. CULTURE, DIET.
96. Hirayama, K. & T. Kusano. 1972. Fundamental studies on physiology of rotifer for its mass culture. II. Influence of water temperature on population growth of rotifer. *Bull. Japan. Soci. Sci. Fish.* 38(12):1357–1363. CULTURE, PHYSIOLOGY, POPULATION DYNAMICS.
97. ——— & K. Nakamura. 1976. Fundamental studies on the physiology of rotifers in mass culture. V. Dry chlorella powder as a food for rotifers. *Aquaculture* 8:301–307. CULTURE, PHYSIOLOGY, DIET.

98. Hirayama, K. & S. Ogawa. 1972. Fundamental studies on physiology of rotifer for its mass culture. I. Filter feeding of rotifer. *Bull. Japan. Soci. Sci. Fish.* 38(11):1207-1214. CULTURE, PHYSIOLOGY, BIOLOGY.
99. ——— & K. Watanabe. 1973. Fundamental studies on physiology of rotifer for its mass culture. IV. Nutritional effect of yeast on population growth of rotifer. *Bull. Japan. Soci. Sci. Fish.* 39(11):1129-1133. CULTURE, PHYSIOLOGY, DIET.
100. ———, ——— & T. Kusano. 1973. Fundamental studies on physiology of rotifer for its mass culture. III. Influence of phytoplankton density on population growth. *Bull. Jap. Soci. Sci. Fish.* 39(11):1123-1127. CULTURE, PHYSIOLOGY, POPULATION DYNAMICS.
101. Howell, B. R. 1973. Marine fish culture in Britain: VIII. A marine rotifer, *Brachionus plicatilis* Muller, and the larvae of the mussel, *Mytilus edulis* L., as foods for larval flatfish. *J. Cons. Cons. Int. Explor. Mer.* 35(1):1-6. FOOD.
102. Hunter, J. R. 1972. Swimming and feeding behavior of larval anchovy *Engraulis mordax*. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 70(3):821-838. FOOD.
103. ———. 1976. Culture and growth of northern anchovy, *Engraulis mordax*, larvae. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 74(1):81-88. FOOD, CULTURE, DIET.
104. Hyman, L. H. 1951. *The Invertebrates Vol. III*. McGraw Hill, New York. BIOLOGY.
105. Ichikawa, K. & H. Hirata. 1973. Size variation in marine rotifer *Brachionus plicatilis* with the lapse of cultivations. Oral presentation. Autumn Meet. *Japan. Soci. Sci. Fish.* POPULATION DYNAMICS.
106. Ito, T. 1955. Studies on the "Mizukawari" in eel-culture ponds. 2. The changes in pH and O₂ in the "Mizokawari" by *Brachionus plicatilis* (Rotifer). *Rep. Fac. Fish. Mie* 2:168-177. ECOLOGY, PHYSIOLOGY.
107. ———. 1955. Studies on the "Mizokawari" in eel-culture ponds. I. The feeding activity of *Brachionus plicatilis* (rotifer) on phyto-nannoplankton (as a cause of "Mizokawari"). *Rep. Fac. Fish. Univ. Mie* 2:162-167. DIET, ECOLOGY.
108. ——— & T. Iwai. 1957. Studies on the "Mizokawari" in eel culture ponds. VII. The relation between the feeding habits of *Brachionus plicatilis* and size of phytoplankters. In Japanese. *Rep. Fac. Fisheries-Pref. Univ. Mie* 2:509-516. DIET, BIOLOGY.
109. ——— & T. Iwai. 1958. Studies on the "Mizokawari" in eel culture pond. XIII. Artificial fertilization of a brackish-water fish pond. *Rep. Fac. Fish. Univ. Mie* 3(1):209-222. In Japanese. ECOLOGY, FOOD.
110. ———. 1958. Studies on the "Mizokawari" in eel culture ponds. XI. The hatching activity of dormant eggs of *Brachionus plicatilis* o. f. Muller. *Rep. Fac. Fish. Univ. Mie* 3:178-192. In Japanese. REPRODUCTION, BIOLOGY.
111. ———. 1960. On the culture of mixohaline rotifer *Brachionus plicatilis*. O. F. Muller in the sea water. *Rep. Fac. Fish. Univ. Mie* 3:708-740. CULTURE, DIET.
112. Jones, A. 1972. Studies on egg development and larval rearing of turbot, *Scophthalmus maximus* L., and brill, *Scophthalmus rhombus* L., in the laboratory. *J. Mar. Biol. Assoc. U. K.* 52(4):965-986. FOOD.
113. Karling, Y. S. 1969. Zoospore fungi of oceania: VI Species with biflagellate zoospores. *Mycopathol. Mycol. Appl.* 37(2):161-170. BIOLOGY.
114. Karpenko, G. I. & E. S. Proskurina. 1970. Kormovye usloviya ozero Solenoyo i pitanie molodi rybtsa i shemai. *Tr. Molodykh. Uch. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr.* 3:130-140. FOOD.
115. Kiechle, H. & H. Buchner. 1966. Untersuchungen uber die variabilitat der Radertieve: V. Dimorphismos and Bisekualitat bei Asplanohua. *Rev. Suisse Zool.* 73(2):283-300. DIET, ECOLOGY, REPRODUCTION.
116. Kim, I. B. 1972. Mass production of rotifers for the culture of fish and some shrimp larvae. *Bull. Kor. Fish. Soc.* 5(2):45-49. In Korean. CULTURE, DIET, FOOD.
117. King, C. E. 1965. Food, age, and the dynamics of a laboratory population of rotifers. *Diss. Abstr.* 26:2931. CULTURE, DIET, POPULATION DYNAMICS.
118. ———. 1967. Food, age, and the dynamics of a laboratory population of rotifers. *Ecology* 48(1):111-128. DIET, ECOLOGY, REPRODUCTION.
119. Kinne, O. 1976. *Marine Ecology*. Vol. III. Cultivation. Part I. Wiley-Interscience Publication, New York, pp. 212-216. CULTURE, DIET.
120. Kitajima, C. & T. Koda. 1975. Influence of the rotifer produced by feeding yeast on the fry of Red Sea Bream. Presented Fall Meeting *Jap. Soc. Sci. Fish.* 303 pp. CULTURE, FOOD.
121. Kittaka, J. 1975. Food and growth of penaeid shrimp. *Proc. 1st International Conf. on Aquaculture Nutrition*, Oct. 1975. pp. 249-285. FOOD.
122. Klimowicz, H. 1968. Occurrence of rotifers (Rota-

- toria) in sewage ponds. *Pol. Arch. Hydrobiol.* 15(3):225-235. ECOLOGY, DIET.
123. Knosche, R. 1968. Das Plankton des Mueheteiches und Lugeteiches der Teichwirtschaft Cunnersdorf (VEB Binnenfischerei Dresden) im Fruehjahr 1966. *Deut. Fisch. Ztg.* 15(5):143-149. DISTRIBUTION.
124. Koehler, J. K. 1965. An E.M. study of the dimorphic spermatozoa of *Asplanchna* (Rotifera). *Z. Zellforsch. Mikrosk. Anat.* 67:57-76. REPRODUCTION, BIOLOGY.
125. ———. 1967. Studies on the survival of the rotifer *Philodina* after freezing and thawing. *Cryobiology* 3(5):392-399. PHYSIOLOGY, BIOLOGY.
126. Koehler, J. K. & L. K. Johnson. 1969. Food supply as a factor in the survival of frozen and thawed rotifers. *Cryobiology* 5(6):375-378. PHYSIOLOGY, BIOLOGY, DIET.
127. Korn, H. 1972. Zur kenntnis des Retrocerebralkomplexes der Rotatorien. *Z. Morphol. Tiere* 71(2):150-159. BIOLOGY.
128. Korringa, P. 1976. *Farming marine fishes and shrimps*. Elsevier Scientific Publishing Co., Amsterdam, The Netherlands, 208 pp. FOOD.
129. Krau, L. 1962. *Brachionus variegatus*, nova especie de Rotatoria (Brachionidae). *Mem. Inst. Osw. Cruz.* 60:389-391. SYSTEMATICS.
130. Kwasiakpui, D. B. 1963. The living rotifer. An ideal teaching subject. *Turtax News* 41:60-62. BIOLOGY.
131. Laderman, A. D. & H. N. Guttman. 1964. Induction of sexuality by alteration of photoperiod in the rotifer *Brachionus rubens*. *J. Exp. Zool.* 152: 5-11. REPRODUCTION, BIOLOGY.
132. Lansing, A. I. 1954. A nongenetic factor in the longevity of rotifers. *Ann. N. Y. Acad. Sci.* 57(5): 455-466. REPRODUCTION, BIOLOGY.
133. Le Maistre, E. 1966. Rotifers. *Vict. Nat.* 83(10-11):260-261; 292-293. BIOLOGY.
134. Lutz, F. E. 1937. *Culture methods for invertebrate animals*. Dover Publication Inc., N. Y. 590 pp. CULTURE, DIET, FOOD.
135. Makamura, N., S. Kasahara & T. Yada. 1971. Studies on the usefulness of the bluegill sunfish, *Lepomis macrochirus* Rafinesque, as an experimental standard animal: II. On the developmental stages and growth from the egg through one year. *J. Fac. Fish. Anim. Husb. Hiroshima Univ.* 10(2): 139-151. In Japanese. FOOD.
136. Maksimova, L. P. 1968. Biologiya moin i kolovratok i ikh razvedenie v kachestve zhivykh kormov dlya lichinok sigovykh ryb. *Izv. Gos. Nauch-Issled Inst. Ozer. Rechn. Ryb. Khoz* 67:107-133. CULTURE, DIET, REPRODUCTION, FOOD.
137. Margalef, R. 1956. Rotiferos marinas del plancton de la via de vigo. *Invest. Pesq.* 6:133-135. DISTRIBUTION.
138. Margaritora, F. G., V. Cottarelli & P. Breber. 1973. Notes on animal ecology in a small mountain pasture pool of the Appennino reatino (central Italy). *Riv. Idrobiol.* 12(1):33-41. In Italian. ECOLOGY.
139. May, R. C. 1970. Feeding larval marine fishes in the laboratory: A review. *Calif. Mar. Per. Comm., Cal COFI Rept.*, 14:76-83. FOOD.
140. ———, D. Popper & J. P. McVey. 1974. Rearing and larval development of *Sigarus canaliculatus*. *Micronesia* 10, 285-298. FOOD.
141. Meadow, N. D. & C. H. Barrows, Jr. 1971. Studies on aging in a bdelloid rotifer: I. The effect of various culture systems on longevity and fecundity. *J. Exp. Zool.* 176(3):303-314. CULTURE, REPRODUCTION, DIET, BIOLOGY.
142. Mito, S., M. Ukawa & M. Higuchi. 1969. On the development and rearing of the larvae of a flounder *Kareius bicoloratus* with reference to its spawning in the culturing pond. *Bull. Nansei Reg. Fish. Res. Lab.* 1:87-102. FOOD.
143. Mizuoka, S. 1972. Food habit of crucian carp, *Carassius carassius langsdorffii* Temminck et Schlegel in Lake Kojima. *Bull. Fac. Educ. Hiroshima Univ.* Part 3 (Sci. Tech.) 21:31-39. In Japanese. FOOD.
144. Monakov, A. V. 1972. Review of studies on feeding of aquatic invertebrates conducted at the Institute of Biology of Inland Waters, Academy of Science, USSR. *J. Fish. Res. Board Can.* 29(4): 363-383. DIET, ECOLOGY, BIOLOGY.
145. Mori, Y. & H. Hirata. 1968. Population growth of marine rotifer *Brachionus plicatilis* under the conditions of several photoperiods. *Prog. Notes Farm. Fish. Shibushi. Mar. Farm T., Seto-Island Sea Farm.* Fish Assoc. 1(5):1-7 (in mimeo). POPULATION DYNAMICS, PHYSIOLOGY.
146. Mori, S. & S. Ishii. 1970. Studies on the culture of food organisms. III. Mass culture of the rotifer. *Rep. Gifu Prefect. Fish. Exp. Sta.*, No. 15 pp. 78-81. CULTURE, DIET, FOOD.
147. Muravleva, R. E. 1968. Pitanie belogo amura—Ctenopharyngodon idella (Val.) na rannikh etapakh razyitiya. *Izv. Akad. Nauk. Turkm. Ssr. Ser. Biol. Nauk* 3:67-75. FOOD.
148. Murayama, S. & T. Saisho. 1967. Seasonal variations of planktons at Lake Ikeda. *Mem. Fac. Fish. Kagoshima Univ.* 16:29-33. In Japanese. POPULATION DYNAMICS.
149. Nash, C. E. 1974. Operational procedures for

- rearing larvae of the grey mullet (*Mugil cephalus* L.). *Aquaculture* 3(1):25-43. FOOD.
150. Nashukhov, O. N. 1971. Sostoyan kormovoi bazy ryb-planktofogov Arakumskilch vodoemov. *Tr. Vses. Nauchno-Issled. Inst. Prudovogo Rybn. Khuz.* 18:149-154. FOOD.
151. Nathan, H. A. & Laderman, A. D. 1959. Rotifers as biological tools. *Ann. N. Y. Acad. Sci.* 77: 96-101. BIOLOGY.
152. Nayar, C. K. G. 1964. Morphometric studies on the rotifer *Brachionus calyciflorus* Pallas. *Current Sci. (India)* 33(15):469-470. BIOLOGY.
153. ———. 1965. Cyclomorphosis of *Brachionus calyciflorus* Pallas. *Hydrobiologia* 25(3/4):538-544. PHYSIOLOGY, DIET.
154. ——— & K. K. N. Nair. 1969. A collection of brachionid rotifers from Kerala. *Proc. Indian Acad. Sci. Sect. B* 69(4):223-233. DISTRIBUTION, SYSTEMATICS.
155. Nozawa, T., S. Dohara, S. Kitamura & K. Kakagawa. 1972. Studies on the mass culture of marine rotifer *Brachionus plicatilis*. Oral presentation. Spring Meeting *Japan Soc. Sci. Fish.* BIOLOGY, CULTURE, DIET.
156. Okamoto, R. 1969. Rearing of Red Sea bream larvae. *Bull. Jap. Soc. Sci. Fish* 35:563-566, 603, FOOD.
157. Oliveira, L. de, R. do Nascimento, L. Krau & A. Miranda. 1962. Observacoes ecologicas s'obre *Brachionus plicatilis* Mueller em aguas tropicais, Salobras e mesosaprobicas (Rotatoria). *Mem. Inst. Ovs. Cruz.* 60:155-163. ECOLOGY.
158. Olivier, S. R. 1965. Rotiferos planctonicos de Argentina: Con claves de las principales especies, datos biologicos y distribucion geografica. *Revta. Mus. La Plata. Sec. Zool.* 8(63):177-260. DISTRIBUTION, BIOLOGY.
159. Paggi, J. C. 1973. Contribucion al conocimiento de les rotiferos dulceaculeulas planctonicos de la Republic Argentina. *Physis. B. Aires.* 32(85): 321-330. DISTRIBUTION, SYSTEMATICS.
160. Panov, D. A., Yu. I. Sorokin & L. G. Motenkova. 1969. Eksperimental'noe izuchenie pitaniya molodj tolstolobikov. *Vopr. Ikhtiol.* 9(1):138-152. FOOD.
161. Pejler, B. 1957. On variation and evolution in planktonic Rotatoria. *Zool. Bidr. Uppsala* 32: 1-66. SYSTEMATICS.
162. ———. 1957. *Studies on the taxonomy and ecology of planktonic Rotatoria.* Upsala (Almqvist & Wiksells). 11 pp. ECOLOGY, SYSTEMATICS.
163. ———. 1958. *Taxonomic studies on planktonic Rotatoria.* *Uppsala Univ. Arssker.* 1958:260-263. SYSTEMATICS.
164. ———. 1962. On the taxonomy and ecology of benthic and periphytic rotatoria. Investigations in northern Swedish Lapland. *Zool. Bidr. Uppsala* 33:327-422. SYSTEMATICS, PHYSIOLOGY.
165. Piavaux, A. & N. Magis. 1970. Donneees complementaires sur la localisation de la chitine dans les enveloppes des oeufs de Rotiferes. *Ann. Soc. Roy. Zool. Belg.* 100(1/2):49-59. BIOLOGY.
166. Pilarska, J. 1972. The dynamics of growth of experimental populations of the rotifer *Brachionus rubens* Ehrbg. *Pol. Arch. Hydrobiol.* 19(3): 265-277. CULTURE, DIET, REPRODUCTION.
167. Pillay, T. V. R. ed. 1972. Coastal aquaculture in the Indo-Pacific region. *Fishing News (Books) Ltd.* London, 497 pp. FOOD.
168. Pontin, R. M. 1966. The osmoregulatory function of the vibratile flomes and contractile vesicle of *Ashplancha* (Rotifera). *Comp. Biochem. Physiol.* 17:111-112. PHYSIOLOGY.
169. Pourriot, R. 1957. Influence de la nourriture sur l'apparation des femelles mictiques, chez deux especes et une variete de *Brachionus* (Rotiferes) *Hydrobiologia* 9:60-65. DIET, REPRODUCTION.
170. Pourriot, R. 1957. Sur la nutrition des rotiferes a partir de alques d'eau dauce. *Hydrobiologia* 9: 50-59. CULTURE, DIET.
171. ———. 1958. Sur l'elevege des rotiferes au laboratoire. *Hydrobiologia* 11:189-197. CULTURE.
172. ———. 1963. Influence de rythme nythemeral sur le cycle sexuel de quelques Rotiferes. *C. R. Acad. Sci. Paris* 256:5216-5219. REPRODUCTION.
173. ———. 1963. Utilisation des Algues bounes unicellulaires pour l'elevege des Rotiferes. *C. R. Acad. Sci. Paris* 256:1603-1605. DIET.
174. ———. 1965. Recherches sur l'ecologie de rotiferes. *Vie Milieu Suppl.* No. 21:1-224. ECOLOGY.
175. ———. 1965. Notes taxonomiques sur quelques Rotifers planctoniques. *Hydrobiologia* 26:579-604. SYSTEMATICS.
176. ———. 1965. Sur le determinisme du mode de reproduction chez les Rotifers. *Schweiz. Z. Hydrol.* 27:76-87. REPRODUCTION.
177. ———, A. Iltis, & S. Leveque-Duwat. 1967. Le plancton des mares natronees du Tchad. *Int. Rev. Gesamten Hydrobiol* 52(4):535-543. DISTRIBUTION.
178. ——— & L. Leborgne. 1970. Teneurs en proteines, lipides et glucides de zooplanktons d'eau douce. *Ann. Hydrobiol.* 1(2):171-178. BIOLOGY.
179. ———. 1971. Prospection hydrobiologique du

- lac de Lere et des marea avoisinantes: II. Rotiferes. *CAH O R S T O M (Off. Rech. Sci. Tech. Outre-Mer) Ser. Hydrobiol.* 5(2):171-174. DISTRIBUTION.
180. ——— & M. Deluzarches. 1971. Recherches sur la biologie des Rotiferes: II. Influence de la temperature sur la duree du developpement embryonnaire et post-embryonnaire. *Ann. Limnol.* 7(1):25-52. BIOLOGY, REPRODUCTION.
181. ———. 1973. Recherches sur la biologie des Rotiferes: III. Fecondite et duree de vie comparees chez les femelles amictiques et mictiques de quelques especes. *Ann. Limnol.* 9(3):241-258. REPRODUCTION, PHYSIOLOGY.
182. ———. 1973. Rapports entre la temperature, la taille des adultes, la longueur des oeufs et le taux de developpement embryonnaire chez *Brachionus calyciflorus* Pallas (Rotifere). *Ann. Hydrobiol.* 4(1):103-115. BIOLOGY, PHYSIOLOGY, REPRODUCTION.
183. ———. 1974. Relations predateur-proie chez les Rotiferes: Influence du predateur (*Asplanchna brightwelli*) sur la morphologie de la proie (*Brachionus bidentata*). *Ann. Hydrobiol.* 5(1):43-55. BIOLOGY.
184. ———. 1975. Predator-prey relationships: Adaptive reactions and fluctuations of zooplankton populations under the influence of selective predation. *Annee. Biol.* 14(1/2):69-86. In French. BIOLOGY.
185. ———. 1975. Rotifera of the Antilles. *CAH O R S T O M Ser. Hydrobiol.* 9(2):81-90. In French. DISTRIBUTION.
186. ——— & C. Roughier. 1976. The dynamics of a laboratory population of *Brachionus dimidiatus* (Bryce) (Rotatoria) in relation to food and temperature. *Ann. Limnol.* 11(2):125-143. In French. CULTURE, DIET, PHYSIOLOGY, REPRODUCTION.
187. Prins, R. & J. Davis. 1966. The fate of planktonic rotifers in a polluted stream. *Oceas. Pap. CC Adams Center Ecol. Stud. Western Mich. Univ.* 15:1-14. DISTRIBUTION, PHYSIOLOGY.
188. Radwan, S. 1974. The rotifers (Rotatoria) of the Parczew region peat-bogs. *Ann. Univ. Mariae Curie-Sklodowska Sect. C Biol.* 29:215-230. ECOLOGY, DISTRIBUTION.
189. Ramadan, F. M., H. Klimowicz & A. Swelim. 1963. The pollutional effect of industrial wastes on rotifers. *Polsk. Arch. Hydrobiol.* 11:97-108. PHYSIOLOGY.
190. Reynolds, J. D. 1970. Biology of the small pelagic fishes in the New Volta Lake in Ghana: I. The lake and the fish: Feeding habits. *Hydrobiologia* 35(3/4):568-603. FOOD.
191. Ridder, M. de. 1959. Studies on brackish water rotifers. V. some rotifers from Weymouth Harbor (British Channel). *Hydrobiologia* 13:128-143. ECOLOGY, DISTRIBUTION.
192. ———. 1960. Les rotiferes. *Nat. belge* 41:349-369. BIOLOGY.
193. Roberts, D. E., B. V. Harpster, W. K. Havens & K. R. Halscott. 1976. Facilities and methodology for the culture of the Southern Sea Bass (*Centropristis melana*). *Proc. 7th Annual Meeting World Mariculture Society. Jan. 25-29.* (James Avault ed.) pp. 163-201. CULTURE, DIET, FOOD.
194. Rothbard, S. 1975. Control of *Euplotes* sp. by formalin in growth tanks of *Chlorella* sp. used as growth medium for the rotifer *Brachionus plicatilis* which serves as feed for hatchlings. *Bamidgeh* 27(4):100-109. CULTURE, FOOD, DIET.
195. Ruhmann, D. 1961. Das Radertier *Brachionus diversicornis*. *Mikrokosmos* 50:301-303. BIOLOGY.
196. Russell, C. R. 1959. Rotifera. Rep. B.A.N.Z. *Antarct. res. Exped.* 1929-31 8 B 3:81-87. DISTRIBUTION.
197. ———. 1961. A simple method of permanently mounting rotifer trophi. *J. Quekett Micr. Cl.* (4)5:377-378. BIOLOGY.
198. ———. 1961. The mounting of rotifers or other small animals in glycerine jelly. *J. Quekett Micr. Cl.* (4)5:384-386. BIOLOGY.
199. Ruttner-Kolisko, A. 1971. Der Einfluss von Temperatur und Salzgehalt des Mediums auf Stoffwechsel und Vermehrungsintensitaet von *Brachionus plicatilis* (Rotatoria). *Verh. Dtsch. Zool. Ges.* 65:89-95. PHYSIOLOGY.
200. ———. 1972. Rotatoria, pp. 99-234. In: H. Bick et al. (eds.), *Die Binnengewasser*. Einzeldarstellungen aus der limnologie und ihren Nachbargebieten. Band XXVI. 1. Teil. Das zooplankton der binnengewasser. ECOLOGY, SYSTEMATICS, BIOLOGY.
201. Sadykov, D. A., I. B. Bogatova & V. I. Filatov. 1975. Amino acid composition of certain freshwater zooplankton representatives. *Gidrobiol. Zh* 11(6):53-57. In Russian. BIOLOGY.
202. Samaan, A. A. & A. A. Anwar. 1972. The ecology of zooplankton in Lake Mariut, Egypt. *Bull. Inst. Oceanogr. Fish* 2:339-371. ECOLOGY.
203. Sato, K. & O. Shinji. 1967. Plankton studies of Lake Hoshozu-gata and Lake Junicho-gata, Toyama Prefecture, Japan. *Annu. Rep. Noto. Mar. Lab.* 7:43-48. In Japanese. ECOLOGY, DISTRIBUTION.

204. Schlais, J. 1975. Put a rotifer in the tank. *The Marine Aquarist* 6(6):52-55. CULTURE, DIET, FOOD.
205. Shafland, P. L. 1976. Initial investigations on rearing the common snook *Centropomus undecimalis* from artificially fertilized eggs. Supplement II. Rearing the mixohaline rotifer *Brachionus plicatilis* in the laboratory. *Annual Report for Non Native Fish Research 1975*, State of Florida Game and Fresh Water Fish Comm. Boca Raton, Fla. FOOD, CULTURE, DIET.
206. Shiogaki, M. & Y. Dotsu. 1973. The egg development and larva rearing of the tripterygiid blenny, *Tripterygion etheostoma*. *Jap. J. Ichthyol.* 20(1): 42-46. In Japanese. FOOD.
207. Siefert, R. E. 1972. First food of larval yellow perch, white sucker, bluegill, emerald shiner, and rainbow smelt. *Trans. Am. Fish Soc.* 101(2): 219-225. FOOD.
208. Smith, W. L. & M. H. Chanley. 1972. Culture of marine invertebrate animals. Plenum Press, N.Y. 338 pp. CULTURE, DIET.
209. Sorokin, Yu. I. & D. A. Panov. 1968. Eksperimental'noe opredelenie pishchevykh potrebnostel lichinok i molodi tolstolobika pri pomoshchi C¹⁴. *Dokl. Akad. Nauk. Ssr.* 182(1):208-210. FOOD.
210. Spataru, P. 1969. Dinamtea nutritiei la plevsca din complexul de balti Crapina-Jijila (Zona inundabila a Dunarii). *Comun. Zool.* 57-63. FOOD.
211. Spectorova, L. V., T. M. Aronovich, S. I. Doroshev & V. P. Popova. 1974. Artificial rearing of the Black Sea turbot larvae (*Scophthalmus maeoticus*). *Aquaculture* 4(4):329-340. FOOD.
212. Strathmann, R. R., T. L. Jahn & J. R. C. Fonseca. 1972. Suspension feeding by marine invertebrate larvae: Clearance of particles by ciliated bands of a rotifer, pluteus, and trochophore. *Biol. Bull. (Woods Hole)* 142(3):505-519. BIOLOGY.
213. Sudzuki, M. 1958. On the general structure and seasonal occurrence of males in some Japanese rotifers. VII. *Zool. Mag. Tokyo* 67:348-354. REPRODUCTION, BIOLOGY.
214. ———. 1964. New systematical approach to the Japanese planktonic Rotatoria. *Hydrobiologia* 23:1-124. SYSTEMATICS, DISTRIBUTION.
215. Sukhanova, E. R., G. S. Kornienko & A. I. Strelova. 1969. Razrabotka biotekhniki podrashchivaniya lichinok tolstolobikov i amurov do zhiznestoikikh stadii. *SB Nauchno-Tekh Inf Krasnodar Fil Vses Nauchno-Issled Inst. Prud. Rybn. Khoz* 1:45-50. FOOD.
216. Sulkin, S. D. 1975. The significance of diet in the growth and development of larvae of the blue crab, *Callinectes sapidus* Rathbun, under laboratory conditions. *J. Exp. Mar. Biol. Ecol.* 20(2): 119-135. FOOD.
217. ——— & C. E. Epifanio. 1975. Comparison of Rotifers and other diets for rearing early larvae of the blue crab *Callinectes sapidus* Rathbun. *Estuarine and Coastal Marine Science.* 3:109-113. FOOD.
218. Suzuki, M. 1957. Studies on the egg carrying types in Rotifera. II. Genera *Brachionus* and *Keratela*. *Zool. Mag., Tokyo* 66:11-20. REPRODUCTION.
219. Talybov, N. B. 1975. Zooplankton of the Akstafa reservoir. *Izv. Akad. Nauk. Az. Ssr. Ser. Biol. Nauk* 1:85-88. In Russian. DISTRIBUTION. POPULATION DYNAMICS.
220. Theilacker, G. H. & M. F. Mac Master. 1971. Mass culture of the rotifer *Brachionus plicatilis* and its evaluation as a food for larval anchovies. *Mar. Biol. (Berlin)* 10(2):183-188. CULTURE, DIET, FOOD, PHYSIOLOGY, REPRODUCTION.
221. Thane-Fenchel, A. 1968. A simple key to the genera of marine and brackish-water rotifers. *Ophelia* 5(2):299-311. SYSTEMATICS.
222. Vasisht, H. S. & S. K. Battish. 1971. The rotifer fauna of north India: *Brachionus*. *Res. Bull. Panjab. Univ. Sci.* 22(1/2):179-188. DISTRIBUTION.
223. Vasilieva, G. C. 1968. Rearing of *Brachionus rubens* Ehrbg. as food of fish larva. Some data on the species biology. *Gidrobiol. Zh* 4(5):39-45. CULTURE, FOOD, BIOLOGY.
224. Valenti, R. J. 1975. Propagating marine fish. *Aq. Industry*. November, 1975. FOOD.
225. Vladimirov, M. Z. & A. I. Naberezhnyi. 1971. Obespechennost' pishchei i kharakter ee isopl'zovaniya molod'yu dnestrovskogo rybtisa y proudakh. *Izv. Akad. Nauk. Mold. Ssr. Ser. Biol. Khim. Nauk* 6:45-48. FOOD.
226. Walker, K. F. 1973. Studies on a saline lake ecosystem. *Aust. J. Mar. Freshwater Res.* 24(1):21-71. POPULATION DYNAMICS.
227. Watanabe, M. & H. Hirata. 1968. Population growth of marine rotifer *Brachionus plicatilis* under conditions of several aerating volume. *Prog. Notes Farm. Fish. Shibushi Mar. Far. St., Seto-Inland Sea Farm. Fish. Assoc.* 1(6):1-7. (in mimeo.) CULTURE.
228. Wear, R. G. 1976. Philippines spawning success with farmed penaeid prawns. *Fish. Farm. Int. Sept.* 1976. pp. 4-6. FOOD.
229. Wiktor, K. 1968. Seasonal modifications in fertility of some rotifera species. *Polskie Archiva Hydrobiol.* 15:9-21.
230. Wulfert, K. 1956. On the feeding habits of the Rotatoria. *Microscope* 10:309-313. BIOLOGY.

231. ———. 1968. Radetiere aus China I. *Limnologica* 6(2):405–416. DISTRIBUTION, SYSTEMATICS.
232. Yasuda, T. 1975. Ecological studies on the jellyfish, *Aurelia aurita* (Linne), in Urazoko Bay, Fukui Prefecture: XI. An observation on ephyra formation. *Publ. Seto. Mar. Biol. Lab.* 22(1–4): 75–80. FOOD.
233. Yamagata, Y. 1972. Culture of the rotifer by feeding yeast. I. Culture temperature and ration. *Mie-Ken Naicuimen Suisan Shikenjo Nenpo.* 7–9. CULTURE, DIET, PHYSIOLOGY.
234. ———. 1973. Difference in the nutritional effect of the two groups of the rotifer each fed with yeast and with marine *Chlorella*. *Mie-Ken Naicuimen Suisan Shikenjo Nenpo.* 14–16. CULTURE, DIET.
235. Yamamoto, K. 1949. Rotifer fauna of Japanese inland waters (1–4) *Jap. J. Limnol.* 14:39–46, 91–98, 141–145, 189–194. In Japanese. DISTRIBUTION, ECOLOGY.
236. ———. 1950. Rotifer fauna of Japanese inland waters (5–6) *Jap. J. Limnol.* 15:42, 50, 81–87. In Japanese. DISTRIBUTION, ECOLOGY.
237. ———. 1952. Rotifer fauna of Japanese inland waters (7–9) *Jap. J. Limnol.* 16:24–30, 68–74, 81–91. In Japanese. DISTRIBUTION, ECOLOGY.
238. ———. 1956. Rotifer fauna of Japanese inland waters (10) *Jap. J. Limnol.* 18:49–57. In Japanese. DISTRIBUTION, ECOLOGY.
239. ———. 1960. Plankton rotatoria in Japanese inland waters. *Hydrobiologia* 16:364–412. DISTRIBUTION, ECOLOGY.
240. Zamaimuradova, Z. M. 1974. Some data on zooplankton of reservoirs in the Mary and Chardzhou regions of the Turkmen SSR. *Izv. Akad. Nauk. Turkm. Ssr. Ser. Biol. Nauk.* 6:74–75. In Russian. DISTRIBUTION.
241. Zoppi de Roa, E. 1974. Comparison of some characteristics of the plankton between the coastal lagoons of Tacarigua and Unare, Venezuela. *Bol. Inst. Oceanogr. Univ. Oriente Cumana* 13(1/2): 129–146. In Spanish. DISTRIBUTION.

SUBJECT INDEX

- Biology** – 23, 29, 31, 35, 36, 37, 47, 55, 56, 57, 58, 64, 65, 67, 68, 69, 70, 71, 72, 74, 76, 77, 88, 98, 104, 108, 110, 113, 124, 125, 126, 127, 130, 131, 132, 133, 141, 144, 151, 152, 155, 158, 165, 178, 180, 182, 183, 184, 192, 195, 197, 198, 200, 201, 212, 213, 223, 230.
- Culture** – 1, 2, 3, 30, 38, 39, 40, 41, 42, 43, 44, 46, 59, 61, 62, 73, 75, 94, 95, 96, 97, 98, 99, 100, 103, 111, 116, 117, 119, 120, 134, 136, 141, 146, 155, 166, 170, 171, 186, 193, 194, 204, 205, 208, 220, 223, 227, 233, 234.
- Diet** – 1, 2, 30, 38, 43, 44, 46, 51, 52, 55, 56, 57, 59, 61, 62, 76, 85, 94, 95, 97, 99, 103, 107, 108, 110, 115, 116, 117, 118, 119, 122, 126, 134, 136, 141, 144, 146, 153, 155, 166, 169, 170, 173, 186, 193, 194, 204, 205, 208, 220, 233, 234.
- Distribution** – 12, 14, 15, 16, 18, 21, 22, 33, 54, 66, 79, 80, 90, 123, 137, 154, 158, 159, 177, 179, 185, 187, 188, 191, 196, 203, 214, 219, 222, 231, 235, 236, 237, 238, 239, 240, 241.
- Ecology** – 3, 8, 9, 11, 12, 14, 21, 22, 34, 38, 45, 53, 71, 80, 81, 85, 87, 106, 107, 109, 115, 118, 122, 138, 144, 157, 162, 174, 188, 191, 200, 202, 203, 229, 235, 236, 237, 238, 239.
- Food** – 4, 6, 13, 28, 48, 60, 81, 82, 89, 92, 93, 101, 102, 103, 109, 112, 114, 116, 120, 121, 128, 134, 135, 136, 139, 140, 142, 143, 146, 147, 149, 150, 156, 160, 167, 190, 193, 194, 204, 205, 206, 207, 209, 210, 211, 215, 216, 217, 220, 223, 224, 225, 228, 232.
- Physiology** – 3, 5, 6, 34, 51, 52, 59, 84, 91, 96, 97, 98, 99, 100, 106, 125, 126, 145, 153, 164, 168, 181, 182, 186, 187, 189, 199, 220, 233.
- Population** – 10, 49, 50, 74, 75, 78, 80, 84, 85, 86, 96, 100, 105, 117, 145, 148, 219, 226.
- Reproduction** – 6, 19, 20, 23, 24, 25, 26, 38, 44, 50, 51, 52, 59, 71, 72, 73, 76, 83, 87, 91, 110, 115, 118, 124, 131, 132, 136, 141, 166, 169, 172, 176, 180, 181, 182, 186, 213, 218, 220, 229.
- Systematics** – 7, 14, 16, 17, 21, 22, 27, 31, 32, 37, 53, 54, 63, 66, 90, 129, 154, 159, 161, 162, 163, 164, 175, 200, 214, 221, 231

ACKNOWLEDGEMENTS

We wish to acknowledge Dr. Robin M. Overstreet for his helpful suggestions in the preparation of this manuscript and Lucia Ross for her perseverance in typing this paper.